

姓名：

學號：

Microeconomics I Homework#1

Fall, 2008

Due date: 10/07

(Notice : 若題目有要求，計算過程及圖形繪製請清楚說明)

I. Multiple choice question

1. What links the decisions of consumers and firms in a market?
 - A) the government
 - B) prices
 - C) coordination officials
 - D) microeconomics

2. Economists tend to judge a model based upon
 - A) the reality of its assumptions.
 - B) the accuracy of its predictions.
 - C) its simplicity.
 - D) its complexity.

3. If the supply curve of a product changes so that sellers are now willing to sell 2 additional units at any given price, the supply curve will
 - A) shift leftward by 2 units.
 - B) shift rightward by 2 units.
 - C) shift vertically up by 2 units.
 - D) shift vertically down by 2 units.

4. The *Figure 1* shows a graph of the market for pizzas in a large town. At a price of \$14, there will be
 - A) no pizzas supplied.
 - B) equilibrium.
 - C) excess supply.
 - D) excess demand.

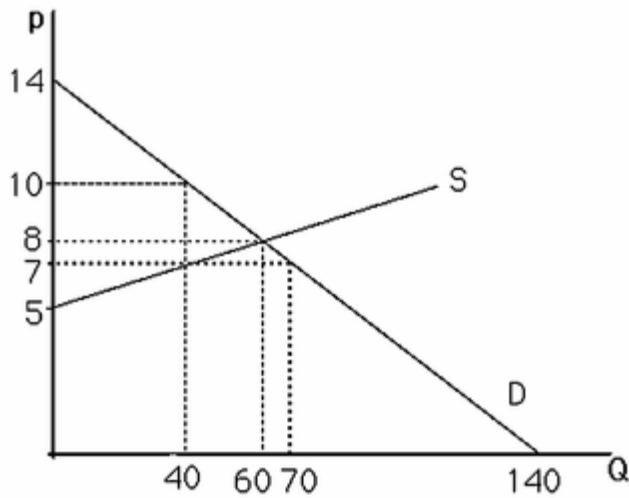


Figure 1

5. The *Figure2* shows four different markets with changes in either the supply curve or the demand curve. Which graph best illustrates the market for coffee after severe weather destroys a large portion of the coffee crop?

- A) Graph A
- B) Graph B
- C) Graph C
- D) Graph D

6. The *Figure2* shows four different markets with changes in either the supply curve or the demand curve. Which graph best illustrates the market for computers after technological advances in making computers occur?

- A) Graph A
- B) Graph B
- C) Graph C
- D) Graph D

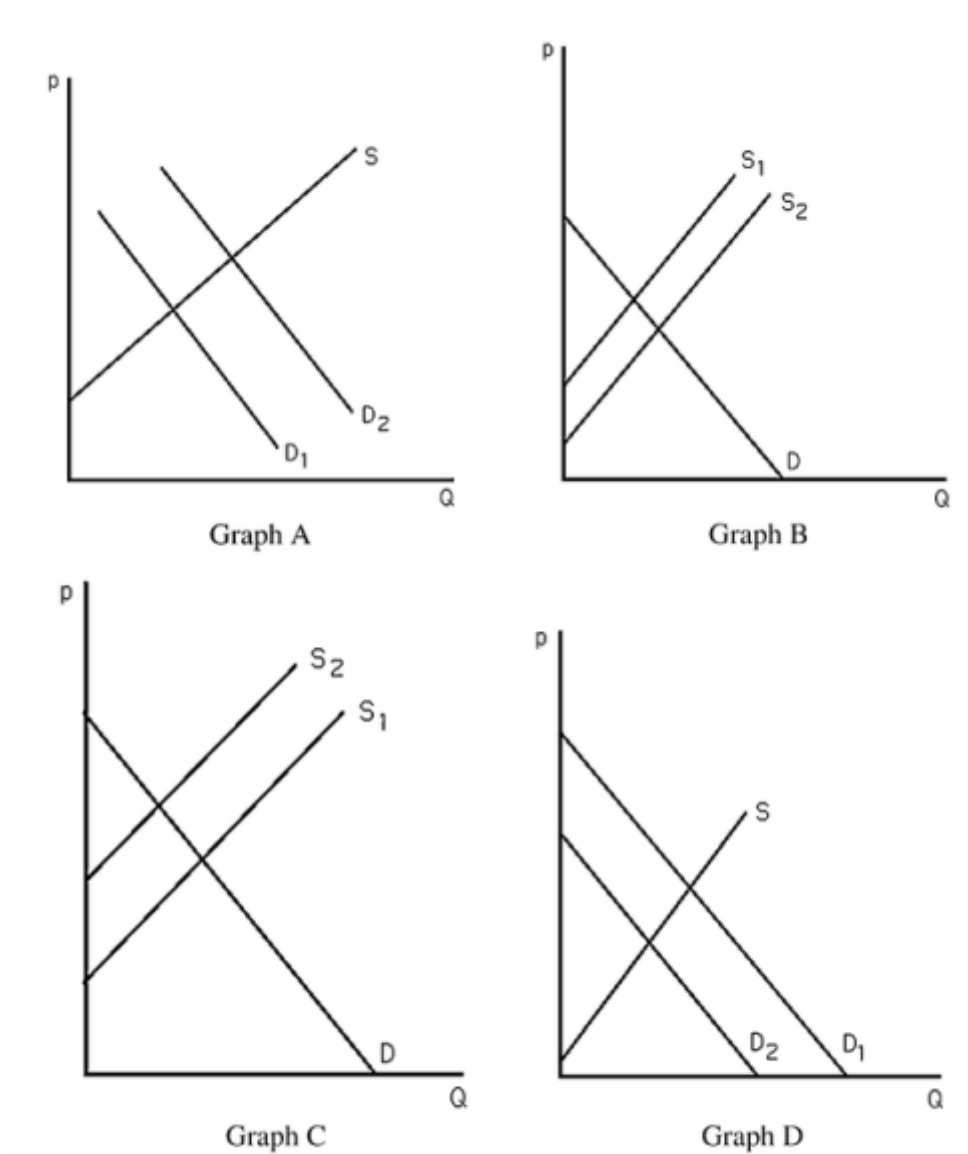


Figure 2

7. A vertical demand curve for a particular good implies that consumers are
- A) sensitive to changes in the price of that good.
 - B) not sensitive to changes in the price of that good.
 - C) irrational.
 - D) not interested in that good.

8. If a consumer doubles her quantity of ice cream consumed when her income rises by 25%, then her income elasticity of demand for ice cream is

- A) 8.0.
- B) 4.0.
- C) .25.
- D) .08.

9. In the late 1980s, the health benefits of oat bran were widely advertised. If the price of oats increased 50%, causing the quantity of oats supplied to increase by 40%, then the price elasticity of supply was

- A) 1.25.
- B) -1.25.
- C) -0.80.
- D) 0.80.

10. The duration of the "short-run"

- A) is one year.
- B) is the same for all goods.
- C) depends on the relative short-run elasticity of demand and supply for the good.
- D) depends on how long it takes consumers or firms to adjust for a particular good.

II. Problem

1. The prices received by soybean farmers in Brazil, the world's second-largest soybean producer and exporter, tumbled 30%, in part because of China's decision to cut back on imports and in part because of a bumper soybean crop in the United States, the world leading exporter (Todd Benson, "a Harvest at Peril," New York Times, January 6, 2005, C6). In addition, Asian soy rust, a deadly crop fungus, is destroying large quantities of the Brazilian crops.
 - a. Use a supply-and-demand diagram to illustrate why Brazilian farmers are receiving lower prices.
 - b. If you knew only the direction of the shifts in both the supply and the demand curve, could you predict that prices would fall? Why or why not?
2. Do you care whether a 15 ¢ tax per gallon of milk is collected from milk producers or from consumers at the store? Why or why not?
3. The demand function for movies is $Q_1 = 120 - p$ for college students and $Q_2 = 120 - 2p$ for other town residents. What is the town's total demand function? Use the diagram to illustrate your answer. (Hint: By looking at your diagram, you'll see that some care must be used in writing the demand function.)
4. Calculate the price and cross-price elasticities of demand for coconut oil. The coconut oil demand function (Buschena and Perloff, 1991) is $Q = 1,200 - 9.5p + 16.2p_p + 0.2Y$, where Q is the quantity of coconut oil demanded in thousands of metric tons per year, p is the price of coconut oil in cents per pound, p_p is the price of palm oil in cents per pound, and Y is the income of consumers. Assume that p is initially 45 ¢ per pound, p_p is 31 ¢ per pound, and Q is 1,275 thousand metric tons per year.